



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,141	02/16/2001	Gen Oikawa	NIT-254	2141
24956	7590	11/01/2004	EXAMINER	
MATTINGLY, STANGER & MALUR, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			MAGEE, CHRISTOPHER R	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/784,141	OIKAWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Christopher R. Magee	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 20 August 2004.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 4 and 10-12 is/are pending in the application.

4a) Of the above claim(s) 1-3 and 5-9 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 4 and 10-12 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. The reply filed 8/20/2004 was applied to the following effect: All relevant objections and 35 USC § 112 rejections are withdrawn as being satisfied.
2. Claims 1-3 and 5-9 have been cancelled without prejudice or disclaimer.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 4 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoshi et al. (hereinafter Hoshi) (US 6,025,978).

➤ Regarding claims 4, 10 and 11, Hoshi discloses a magnetic disk apparatus having a magnetic thin film head comprising [col. 1, lines 15-21]:

a write head element [12]; and

a read head element [5];

wherein a ferromagnetic film [10] having a soft magnetic characteristics and a magnetic shield function is formed of NiFe permalloy material [col. 2, lines 30-40] by electroplating [col. 8, lines 34-39] in the vicinity of a sensor film [5] arranged as said read element; and

wherein the Ni composition of permalloy magnetic films is 80.8 wt. % to 82 wt. % [col. 2, lines 50-54]. Since the claimed limitation is included in the stated range of Hoshi, the claimed content accuracy is incorporated as well.

Hoshi shows said ferromagnetic layer [10] is composed of a formed layer having a thickness exceeding 1.0  $\mu\text{m}$  and having a thickness less than 1.0  $\mu\text{m}$  [Figures 3 and 4].

➤ Regarding claim 12, Hoshi teaches when the ferromagnetic film [10] is formed, a current density used for the electroplating changes [col. 9, lines 9-13].

#### ***Response to Arguments***

4. Applicant's arguments filed 8/20/2004 have been fully considered but they are not persuasive.

The Applicant assert on pages 6-7:

*"Claims 1, 4 and 10 stand rejected under 35 U.S.C. 5102 as being anticipated by Hoshi et al. This rejection is overcome by the amendments made to claims 4 and 10, which set forth that the first region of the ferromagnetic film, which exceeds a film thickness of 1.0  $\mu\text{m}$  from an initial formed layer, has a Ni content accuracy of  $\pm 0.1$  wt%; and the second region of the ferromagnetic film, where a film thickness is 1.0  $\mu\text{m}$  or less from the initial formed layer, has a Ni content accuracy of  $\pm 0.3$  wt%. This relation is not disclosed or suggested by Hoshi et al. and, therefore the rejection under 35 U.S.C. 5102 should be withdrawn."*

The Examiner maintains Hoshi '978 discloses and teaches all of the elements in the claimed invention. Accuracy is defined as a "degree of conformity of a measurement to a standard or a true value" [Webster's Collegiate Dictionary, page 8]. In this case, Hoshi discloses the Ni composition of the permalloy magnetic films is 80.8 wt. % to 82 wt. % [col. 2, lines 50-54]. Since the claimed limitation is included in the stated range of Hoshi, the claimed content accuracy is incorporated as well. Therefore, the rejection of claims 4 and 10 is upheld.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (703) 605-4256. The examiner can normally be reached on M-F, 8: 00 am-5: 30 pm.

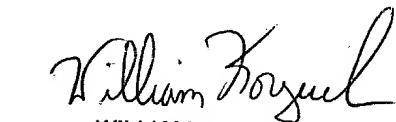
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 21, 2004



Christopher R. Magee  
Patent Examiner  
Art Unit 2653



WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600